

## REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow, are respectfully requested.

Claims 1 and 15 have been canceled without disclaimer or prejudice. Claims 12 and 18 have been rewritten in independent form to include the features of claims 1 and 15, respectively. A former feature of claim 15 has been added as new claim 30. The dependencies of claims 3, 7, 16, 17, 20 and 21 have been amended consistent with the above claim amendments. Claim 13 has been amended to correct a typographical error. Claims 9 and 25 have been amended in response to §112 issues. Claims 3-14, 16-18 and 20-30 are believed to be currently pending in this application.

The drawings have been objected to for the reason set forth on page 2 of the Office Action. Reconsideration is requested of this objection for at least the following reasons.

The Office Action contends that while claim 13 recites a pipe of a pump for raising liquid or a lift-type sampler, this feature allegedly is not shown in the drawings. Respectfully, Applicant disagrees.

A review of Figure 7 shows a lift-type sampler 61 (page 12, line 20, of the specification). A review of Figure 8 shows a pump 70 used to withdraw a sample 63 from the tank 60 via a pipe leading from the bottom of the tank to the pump (page 12, lines 18-19). Accordingly, the feature recited in claim 13 of withdrawing a sample using a pipe of a pump or a lift-type sample is clearly depicted in Figures 7 and 8. In view thereof, the objection to the drawings should be withdrawn.

Claims 1 and 3-14 were rejected under 35 U.S.C. §112, second paragraph, for the reason given in paragraph (1) on page 3 of the Office Action. Reconsideration is requested of this rejection for at least the following reasons.

The legal standard for determining compliance with the second paragraph of 35 U.S.C. §112 is whether the claims reasonably apprise those of ordinary skill in the art of their scope. See *In re Warmerdam*, 33 F.3d 1354, 1361, 31 U.S.P.Q.2d 1754,1759 (Fed. Cir. 1994). In determining whether this standard is met, the definiteness of the language employed in the claim should be analyzed, not in a vacuum, but in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. *In re Johnson*, 558 F.2d 1008,1015, 194 U.S.P.Q. 187,193 U.S.P.Q. 187,193 (CCPA 1977).

A review of the specification indicates that the present invention relates to the detection of non-methane hydrocarbons in a gaseous mixture composed of at least 95% oxygen along with minor quantities of methane, non-methane hydrocarbons, and possibly nitrogen and argon, among others. Note, for example, page 1, lines 5-11; page 2, lines 6-12 and 25-28; page 5, lines 17-31; etc. of the specification. The preamble of claim 12 is directed to the detection of non-methane hydrocarbons in a liquid oxygen bath. When claim 12 specifies that the evaporated gas comprising at least 95% oxygen, methane and non-methane hydrocarbons, those of ordinary skill would readily comprehend that the gas is composed of at least 95% oxygen and also comprises methane and non-methane hydrocarbons.

Applicant respectfully submits that claim 12 reasonably apprises those of ordinary skill of the scope thereof when analyzed in light of "the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art." Thus, those of ordinary skill would reasonably conclude that the evaporated gas described in claim 12 contains at least 95% oxygen and methane and non-methane hydrocarbons.

In view of the above, the §112 rejection of claims 3-14 should be reconsidered and withdrawn. Such action is earnestly requested.

Claims 15-18, 28 and 29 were rejected under 35 U.S.C. §112, second paragraph, for the reasons given in paragraph (2) on page 3 of the Office Action. Reconsideration of this rejection is respectfully requested for at least the following reasons.

The issue in rejections based on indefiniteness is whether the claims in question reasonably apprise those of ordinary skill in the relevant art of their scope. Respectfully, Applicant submits that those of ordinary skill would clearly be apprised of the scope of the claims in question upon reviewing the present disclosure. The Office Action comments that it is unclear how each of the means are operatively connected. Applicant believes that a review of Figures 7 and 8 conclusively shows each claimed feature and how each feature of the device operates to obtain the desired results.

Section 2172.01, MPEP, has been reviewed as has the case law cited therein. The disputed claims in the cited cases are quite different from the present claims. *In re Collier*, 158 USPQ 266 actually involved a rejection on the ground of aggregation, a rejection no longer applied. Note §2173.05(k), MPEP.

For at least the aforementioned reasons, the §112, second paragraph, rejection of the device claims should be reconsidered and withdrawn. Such action is respectfully requested.

Claims 9 and 25 were rejected for the reasons given in paragraphs (3) and (4) of the Office Action. In response, these claims have been amended for purposes of clarification. In view thereof, it is respectfully requested that the §112 rejection of claims 9 and 25 should be withdrawn.

Claims 1, 3-8, 10-18 20-24 and 26-29 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,765,397 to Honda et al in view of U.S. Patent No. 4,042,332 to Saitoh et al for the reasons given on pages 4-8 of the office Action. Reconsideration of this rejection is requested in view of the above amendments and the following remarks.

Honda et al '397 is directed to an air liquification process designed to prevent hydrocarbons from being contained at high concentrations in liquid oxygen in a main condenser-evaporator. Note column 2, lines 22-25. By this process, hydrocarbons never accumulate in the condenser-evaporator (column 7, lines 53-60). Honda et al '397 solves the problem of the accumulation of hydrocarbons in the evaporator by implementing a liquification process which removes hydrocarbons from gaseous oxygen before entry into the condenser-evaporator.

Saitoh et al '332 concerns a method for detecting non-methane hydrocarbons in a gaseous mixture also containing oxygen and methane. The method is designed to measure hydrocarbon levels in smog, i.e., air, which contains about 20-21% oxygen, as opposed to the high levels of oxygen in the liquid oxygen baths of Honda et al '397. The present claims are directed to a process and device for detecting the level of non-methane hydrocarbons in a liquid oxygen bath of an evaporator of a unit for producing gases from air. In the process of Honda et al '397, the hydrocarbons are eliminated before entry into the condenser-evaporator. Accordingly, there would have been no motivation to modify the process of Honda et al '397 to include the detection technique of Saitoh et al '332. Nor would those of ordinary skill be motivated to combine the respective disclosures of the cited documents since there is no reasonable expectation that the detection technique of Saitoh et al '332 could be successfully applied to the process of Honda et al '397 which involves treating highly concentrated oxygen-containing compositions.

For at least these reasons, the §103(a) rejection should be reconsidered and withdrawn. Such action is earnestly requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683.

Respectfully submitted,

BUCHANAN INGERSOLL PC  
(INCLUDING ATTORNEYS FROM BURNS, DOANE, SWECKER & MATHIS)

Date: August 18, 2005

By: George F. Lesmes  
George F. Lesmes  
Registration No. 19,995

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620